Objective: To evaluate the performance of elderly participants in social groups living together and practicing basic and instrumental activities of daily life. 

Method: A longitudinal study with quantitative approach, developed with 111 elderly members of groups living in Santa Cruz / RN, in the period from March to May 2011. We used a questionnaire for demographic and epidemiological characterization and scales Katz and Lawton for evaluation of ADLs. Results: There was a prevalence of females with a mean age of 70.7 and standard deviation ± 8.77 years. According to Katz and Lawton scale of 88.28% and 27.92% of the elderly were classified as independent, respectively. Conclusion: The community centers as spaces are relevant in the context of the health of the elderly and should be encouraged and supported by government. 

Descriptors: Aged, Health of the elderly, Centers of connivance and leisure.

ABSTRACT

Avaliação das atividades básicas e instrumentais de vida diária de idosos participantes de grupos de convivência

Evaluation of basic and instrumental activities of daily life of elderly participants in groups living together

Evaluación de las actividades básicas e instrumentales de la vida diaria de idosos participantes de grupos de convivencia

Isaiane da Silva Carvalho 1 , Alcides Viana de Lima Neto 2 , Bárbara Coeli Oliveira da Silva 3 , Vilani Medeiros de Araújo Nunes 4 , João Carlos Alchieri 5

Objective: Avaliar o desempenho de idosos participantes de grupos de convivência na realização das atividades básicas e instrumentais de vida diária. Método: Estudo longitudinal com abordagem quantitativa, desenvolvido com 111 idosos integrantes de grupos de convivência no município de Santa Cruz/RN, no período de março a maio de 2011. Utilizou-se um questionário para a caracterização epidemiológica e demográfica e as escalas de Katz e e de Lawton para avaliação das AVDs. Resultados: Houve uma prevalência do sexo feminino, com idade média de 70,7 e desvio padrão ± 8,77 anos. Segundo a escala de Katz e Lawton, 88,28% e 27,92% dos idosos foram classificados como independentes, respectivamente. Conclusão: Os centros de convivência constituem-se como espaços relevantes no contexto da saúde do idoso e devem ser estimulados e apoiados pelos órgãos governamentais. Descritores: Idoso, Saúde do idoso, Centros de convivência e lazer.

RESUMO

Objetivo: Evaluar el desempeño de los participantes mayores en los grupos sociales, en la realización de las actividades básicas e instrumentales de la vida diaria. Método: Estudio longitudinal con un enfoque cuantitativo, desarrollado con 111 miembros de más edad de los grupos que viven en Santa Cruz / RN, en el periodo de marzo a mayo de 2011. Se utilizó un cuestionario para la caracterización y las escalas de Lawton y Katz para la evaluación de las AVD demográfica y epidemiológica. Resultados: Se observó una prevalencia de mujeres con una edad media de 70,7 y una desviación estándar de ± 8,77 años. De acuerdo con la escala de Katz y Lawton, 88,28% y 27,92% de las personas de edad fueron clasificados como independiente, respectivamente. Conclusión: La comunidad de centros como espacios son relevantes en el contexto de la salud de las personas mayores y deben ser alentados y apoyados por el gobierno. Descritores: Anciano, Salud del anciano, Centros de convivencia e lazer.

RESUMEN

Objetivo: Evaluar el desempeño de los participantes mayores en los grupos sociales, en la realización de las actividades básicas e instrumentales de la vida diaria. Método: Estudio longitudinal con un enfoque cuantitativo, desarrollado con 111 miembros de más edad de los grupos que viven en Santa Cruz / RN, en el periodo de marzo a mayo de 2011. Se utilizó un cuestionario para la caracterización y las escalas de Lawton y Katz para la evaluación de las AVD demográfica y epidemiológica. Resultados: Se observó una prevalencia de mujeres con una edad media de 70,7 y una desviación estándar de ± 8,77 años. De acuerdo con la escala de Katz y Lawton, 88,28% y 27,92% de las personas de edad fueron clasificados como independiente, respectivamente. Conclusión: La comunidad de centros como espacios son relevantes en el contexto de la salud de las personas mayores y deben ser alentados y apoyados por el gobierno. Descritores: Anciano, Salud del anciano, Centros de ocio y convivencia.

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Aging does not refer to individuals or to each generation, but to the changes in the age structure of the population, which occurred in several countries, including Brazil, which until then had a predominantly young population, almost stable. With the decline in fertility, the pace of annual growth in the number of births went immediately to fall, what caused the initiation of a continuous process of narrowing of the base of the age pyramid, as a result of an aging population.

The status of the elderly, in paragraph IV, indicates the need for feasibility of alternative forms of participation, occupation and living of the elderly with other generations. In this sense, the familiarity groups configure as spaces that offer multiple recreational activities for the elderly, leisure and information such as: singing lessons, dance and choir, theater and body language, in addition to lectures and events related to the elderly, finally, activities that promote cultural development through the participation of society. The familiarity groups were built in the decade of 1970, for the purpose of providing social contact to those who had no financial conditions to attend social clubs. From 1994, these groups have been closest to the community to the rescue of citizenship of individuals at various levels.

As they possess autonomy, individuals will make their own decisions, have freedom of choice with regard to what to do and how to do it, including actions of self-control over their own life. Thus, the realization of self-care by the elderly reflects directly in staying socially integrated, preventing the loss of quality of life, while maintaining their independence in carrying out the activities of daily living (ADL) and instrumental activities of daily living (IADL). The ADL encompass basic mobility (transfer, wander) and the care of themselves (food, personal hygiene, dressing). The IADL refers to a great number of common tasks to which an individual must be able to perform to maintain its independence, autonomy and social relationship, such as: cooking, administer the money, using transport and medicate themselves.

The brief assessment can help on the tracing of the elderly with risk of seriously ill, hospitalization and those susceptible to lose the ability to perform the activities of daily life. It enables therefore proposals for effective rehabilitation and guides care actions of health professionals and caregivers of the elderly, whose the main goal is to delay the aggravations of the disease and promote a better quality of life for the elderly and the caregiver.

To assess the level of dependence of the elderly participants in a familiarity group in executing activities which make possible to take care of them and live independently, the scales of Katz were opted for the ADL and Lawton for the IADL, to be brief, simple and easy to apply.
METHOD

Given the above, this study aimed to evaluate the performance of elderly participants in familiarity groups in the municipality of Santa Cruz/RN, in the realization of the ADL and IADL.

It is a longitudinal study, descriptive in nature, performed within a quantitative approach. The sample was composed of elderly members of familiarity groups located in the urban area of the municipality of Santa Cruz, in the interior of Rio Grande do Norte. The elderly were registered by the Social Welfare Secretary (SWS) of the locality and were chosen by simple random sampling, in which all individuals have the same probability of integrating the sample of the study. After the application of the criteria of inclusion and exclusion, 111 elderly were obtained.

The criteria for inclusion in the sample were participants with age less than 60 years old, of both sexes, presenting good general condition and not showing mental limitations and/or difficulties hearing and speaking, being able to answer questions and accept voluntarily participate in the study by completing the Informed Consent Form (TCLE). In case of impossibility to do so, he should use the placeholder for digital printing.

Individuals below 60 years old were excluded from the study and those unable to respond to questions, as well as those who have obtained lower than the expected performance for their education on the Mini-Mental State examination (MMSE) - version for use in Brazil, with cut-off points according to education. It should be noted that the above test was used as a criteria for inclusion or exclusion of the subject, therefore the data is not part of the results and discussion of the present study.

The data were collected in the period from March to May 2011, through structured interview with open and closed questions, composed of the following instruments: a questionnaire for the epidemiological and demographic characterization of the elderly, with social and health variables and instruments for evaluation of functional capacity like the Katz and Lawton scale.

The Katz scale evaluates the independence in the performance of six functions: bathing, dressing, toileting, transfer, continence and food, through which the elderly are classified in dependent or independent.

The following pattern was adopted for the analysis of results of Katz: A - independent for all activities; B - independent for all activities except one; C - independent for all activities except bath and one more additional; D - independent for all activities except bathing, dressing up and one more additional; E - independent for all activities except bathing, dressing up, toileting and one more additional; F - independent for all activities except bathing, dressing up, toileting, transfer; G - dependent for all activities; Other - dependent in at least two functions, but not classified in C, D, E or F. The Lawton scale assesses the functional performance of the elderly as being or not able to maintain an independent life according to nine functions: preparation of meals, self
administration of medicine, shopping, financial control, telephone use, clean the house, wash their own clothes, realization of small household chores and offset from home to more distant places alone.\textsuperscript{11} For each question assessed on the scale of Lawton, there is a possibility of 3 answers: 1 - without help; 2 - with partial help; 3 - unable to do, being the high score obtained equal to 27 points. The elderly who obtained 9 points were classified as independents, from 10 to 18 moderately and from 19 points to 27 points dependent.\textsuperscript{11}

The interviews were carried out in the meeting places of familiarity groups, after previous schedule, so that it will not interfere in the activities planned for the day. In the impossibility of accomplishment, the researchers headed to the residence of the elderly. This research was approved by the Ethics and Research Committee of the Federal University of Rio grande do Norte, under the opinion number 045/2011. The whole process took into account the driving ethical precepts established by resolution 196/96 of the National Health Council (CNS).\textsuperscript{12} For data analysis, it was used the Excel software (Microsoft \textsuperscript{®}).

\section*{RESULTS AND DISCUSSION}

Socio-demographic profile and health of elderly participants

The predominance of the subjects included in the study were female, with a total of 83 elderly (74.77\%). This data is in accordance with the results of several similar studies with elderly populations, which reveal a predominance of females.\textsuperscript{13-15} The table 01 shows that the age group ranged from 60 to more than 89 years old, with higher incidence between 65 to 69 years old, with an absolute frequency of 32 (28.83\%). The average age was 70.7 and standard deviation of ± 8, 77 years old. In a study conducted with elderly people entering in Autonomy Program for Physical Activity (APPA), the authors identified an average age of 66.45 years old, next value to the result found.\textsuperscript{16}

Table 01: Distribution of socio-demographic variables of the participants

<table>
<thead>
<tr>
<th>Analyzed Variables / Absolute Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>28</td>
</tr>
<tr>
<td>Female</td>
<td>83</td>
</tr>
<tr>
<td>Total</td>
<td>111</td>
</tr>
<tr>
<td>Idade (anos) / Age (years)</td>
<td></td>
</tr>
<tr>
<td>60-64</td>
<td>21</td>
</tr>
<tr>
<td>65-69</td>
<td>32</td>
</tr>
<tr>
<td>70-74</td>
<td>21</td>
</tr>
<tr>
<td>75-79</td>
<td>19</td>
</tr>
<tr>
<td>80-84</td>
<td>12</td>
</tr>
<tr>
<td>85-89</td>
<td>4</td>
</tr>
<tr>
<td>&gt; 89</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td>111</td>
</tr>
<tr>
<td>Marital Status</td>
<td></td>
</tr>
<tr>
<td>Single</td>
<td>17</td>
</tr>
<tr>
<td>Married</td>
<td>58</td>
</tr>
</tbody>
</table>
Most of the elderly was married, 58 (52.25%) presented prevailing minimum wage income 59 (53.15%) and the same percentage of elderly had from 1 to 3 dependents. A study developed also in the Northeast, whose objective was to identify the perception of family support in low income elderly and the factors associated with the prevalence of the elderly was also the marital status married (45.50%), with income of 1 minimum wage (79.10%).

One of the variables of health addressed was the practice of physical activity. The result was surprising because 97 (87.39%) of the sample reported not practicing any type of physical activity. This result is distinct from the results found in a study that aimed to evaluate the social and sanitary characteristics and their possible influences on the quality of life of elderly residents in the municipality of Teixeiras (MG), in the Southeast region of Brazil. In this study, the authors identified that 55% of the sample of elderly practiced physical activity regularly. Studies show that there is a decrease in the practice of physical activity with advancing age. This fact contributes to increase the index of elderly physically inactive. Others show that regular physical activity has been shown as important as regards the reduction of various compromises among the elderly, as for example: functional aspects, cognitive performance and depression.

The incidence of chronic diseases is also an important factor that influences directly on the quality of life of the elderly population. In the analyzed sample, 7 (6.31%) elderly patients had diabetes and 61 (54.95%) were hypertensive. These results are similar to a study on prevalence of physical and leisure activities among a group of elderly. Such study showed that 62.2% of the elderly were suffering hypertension and 17.7% of diabetes mellitus.

Application of the Katz scale

When assessing the implementation of the Katz Scale, it was observed that 98 elderly (88.28%) were classified as independent for all ADL and 11 (9.90%) independents for all activities except one (Table 02). A study about fragility with 64 elderly participating in a familiarity group, developed in Itabira-MG, it was identified that the vast majority of elderly said being independent for all activities. It should be noted that the activities in...
which the elderly needed assistance, were dressing up and continence, with 3.1% and 26.6%
respectively.22 With regard to the present study, the basic activity of daily living with
highest percentage of completion by the elderly was feeding 111 (100%), followed by the
ability to dress and personal hygiene also with 110 elderly (99.09%), as well as transfer and
ability to bathe alone both with 109 elderly (98.19%) and lastly, continence, totaling 98
elderly (88.28%).

The results corroborate a survey performed about independence for the ADL elderly
located in a day center in Maringá-PR, considering that the independence of older people is
an expected result because it composes one of the aspects considered in the selection of
elderly admission in the familiarity center. It is usually required that the elderly be able to
care for themselves, participate in recreational activities and has no mental or cognitive
impairment, since there is not a differentiated service nor a sufficient quantitative people
to help all elderly people in their activities.23

Table 02: Distribution of second degree elderly for dependency of ADL according to
Katz Scale. Santa Cruz/RN, 2011.

<table>
<thead>
<tr>
<th>Classification</th>
<th>Absolut Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>A - Independent for all activities.</td>
<td>98</td>
<td>88.28</td>
</tr>
<tr>
<td>B - Independent for all activities except one.</td>
<td>11</td>
<td>9.9</td>
</tr>
<tr>
<td>C - Independent for all activities except bath and one more additional.</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>D - Independent for all activities except bathing, dressing up and one more additional.</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>E - Independent for all activities except bathing, dressing up, toileting and one more additional.</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>F - Independent for all activities except bathing, dressing up, toileting, transfer and more.</td>
<td>1</td>
<td>0.9</td>
</tr>
<tr>
<td>G - Dependent for all activities</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Other - Dependent in at least two functions, but not sort in C,D,E and F.</td>
<td>1</td>
<td>0.9</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>111</strong></td>
<td><strong>99.98</strong></td>
</tr>
</tbody>
</table>

In a survey, whose objective was to estimate the prevalence and factors associated
with functional incapacity for basic and instrumental activities of daily living in elderly,
independence was observed for most activities and, when in the presence of dependence,
most were showed in just one activity, once these data was according to the results
presented here.24

**Application of Lawton Scale**

With regard to the scores obtained by the elderly on the Lawton Scale, which
assesses the independence for realization of IADL, showed that 76 elderly (68.46%) obtained
values between 10 and 18 points on evaluated items that is why they were classified as
moderately dependent. In turn, 31 elderly (27.92%) were considered independent and only 4
elderly (3.6%) were qualified as dependents, according to data from the Table 03.
Table 03: Distribution of second degree elderly for dependency of AIVD according to Lawton Scale. Santa Cruz/RN, 2011.

<table>
<thead>
<tr>
<th>Lawton Punctuation</th>
<th>Classification</th>
<th>Absolute Frequency</th>
<th>Relative Frequency (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>9 pontos</td>
<td>Independent</td>
<td>31</td>
<td>27.92</td>
</tr>
<tr>
<td>10 a 18</td>
<td>Moderately dependente</td>
<td>76</td>
<td>68.46</td>
</tr>
<tr>
<td>19 a 27</td>
<td>Dependent</td>
<td>4</td>
<td>3.6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>111</strong></td>
<td><strong>99.98</strong></td>
</tr>
</tbody>
</table>

Generally, the application of the Lawton Scale in the elderly, who have integrated the sample, demonstrated a degree of independence of 27.92%, similar value to the found in a study on ability of elderly people in the community to develop ADL and IADL, in Goiânia. The authors reported that, of the 95 elderly participants, 27.4% were independent, 68.4% had partial dependency and 4.2% total dependence for realization of the IADL.25

The fact of the IADL to translate the ability of elderly to administer the environment that surrounds it implies significant relevance to the fact of the existence of dependency for certain activities, since the higher the level of dependency, the worse will be the impacts on the well-being and quality of life. In terms of the IADL in which the elderly were classified as unable to perform, it was emphasize the use of the telephone, 24 elderly (21.62%), to the act of washing their own clothes, 10 elderly (9.00%) and clean the house, 7 elderly (6.30%) (Table 02). Such data corroborates a study26, about the profile of elderly women met in a support group for prevention of functional incapacity, which identified that one of the IADL, the cited as incapable of being performed by the elderly were washing (15%), clean the house (10%) and use the phone (3%).

The difficulty regarding the use of the phone might be related to deficiencies in terms of level of education, which compromises and, sometimes, make inaccessible to these elderly, the use and handling of new technologies. The fact that considers them unable to perform activities such as laundry and clean the house causes compromises in maintaining personal hygiene and of their own domicile. Such reality can negatively impact the self-esteem of elderly by the fact of not being able to perform activities, once developed independently.27 About leaving the house alone to places more further, it has been observed that 39 elderly (35.13%) do with partial aid, as well as using the telephone, 26 elderly (23.42%) and control their own money, 22 elderly (18.81%) (Table 04).
The functional capacity of the elderly configures as a relevant indicator of the level of independence. Thus, it allows the institution of preventive and therapeutic actions, with the aim of reducing mechanisms that leverage the decline of individual skills in exercise everyday activities.  

In general terms, it was observed that there was a prevalence of elderly female, with an average age of 70.42 years old, married, with 1 minimum salary income and account for 1 to 3 dependents. When evaluating performance in carrying out the ADL with the Katz scale, it was noticed that 88.28% were independent to carry out such activities, whereas, with the scale of Lawton, 27.92% were classified as independents.

The divergence between the findings in the two scales is justified by the fact the activities present at the scale of Lawton present a higher level of functional requirement of the elderly, once involving it performance while being active within the society, like for example, shopping and travel to a distant location alone.

So, to identify that according to Katz scale most of the elderly was regarded as an independent and in the scale of Lawton moderately dependent, it appears that familiarity centers constitute relevant spaces in the context of the health of the elderly and should be encouraged and supported by government agencies.
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